

Hiring and Placement Practices for Individuals with Disabilities within the STEM Workforce

Denna Lambert

NASA Goddard Space Flight Center

Equal Opportunity Programs Office

Email: denna.s.lambert@nasa.gov

Phone: 301-286-0844

Slide 2: Picture of Outer Space with a partial view of Earth in the lower half of the screen. Vague images of nebulae and star constellations can be seen.

Slide Text

NASA Vision:

To improve life here,

To extend life to there,

To find life beyond.

The NASA Mission:

To understand and protect our home planet,

To explore the universe and search for life,

To inspire the next generation of explorers

... as only NASA can.

Slide 3: NASA Field Centers

Picture Description: Outline of the US Map.

Indicates NASA Centers across the country:

- NASA Headquarters - Washington, D.C.
- Ames Research Center - Moffett Field, California
- Dryden Flight Research Center - Edwards, California
- Glenn Research Center - Lewis Field, Ohio
- Goddard Space Flight Center - Greenbelt, Maryland
- Jet Propulsion Laboratory - Pasadena, California
- Johnson Space Center - Houston, Texas
- Kennedy Space Center - Cape Canaveral, Florida
- Langley Research Center - Hampton, Virginia
- Marshall Space Flight Center - Huntsville, Alabama
- Stennis Space Center - Mississippi

18,600 civil servants and thousands of contractors in the private sector.

Slide 4: NASA Skill Competency

Information Technology: Computer Science, Computational Scientists, Computer Engineering;

Science and Math: Applied Optics, Chemistry, Physics, Materials Science, Mathematics;

Business: Accounting, Business and Public Administration, Economics, Finance, Logistics, Management Information Systems

Engineering: Aerospace, Architecture, Chemical, Civil, Electrical/Electronic, mechanical, Optical, Reliability, Safety, Micro-Electrical Mechanical Systems (MEMS), Laser Component and Systems Development, Super Conducting Detector Systems Development, Systems Engineering, Optical Systems Development

Slide 5: Challenges to Students with Disabilities in STEM Fields.

- * Limited exposure to role models of engineers and scientists with visible disabilities.
- * Lack of a support system for assistive technology and alternative techniques specific to a disability.
- * Lack of encouragement from school personnel when considering technical fields during career exploration.
- * Limited mentoring and professional development relating to a disability.

Slide 6: NASA's Ideal Pipeline to Employment

Students can enter NASA's pipeline as early as middle school. Education programs that target students with disabilities.

- * **Earth Science Camp** – Middle School
- * **Reach for the Stars** - Middle School
- * **Rocket-On** - Middle to High School
- * **Youth Slam** - Middle to High School
- * **STEP-UP** - High School

K-12 programs lead to Transition Programs

- * **High School / High Tech**
- * **EXCEL**

Transition programs lead to University Programs

- * **ACCESS**
- * **Workforce Recruitment Program**

University programs can lead to NASA employment in both the public and private sector.

Slide 7: General Program Structure

- * Student programs range in length between 4 to 10 weeks
- * Students are expected to participate in general intern activities (i.e. speakers, presentations)
- * Each student is required to present projects to student program managers in preparation for presentation to center manager and outside guests

Slide 8: Selection Process

- * Each student is selected based on their talent and interest in STEM fields
- * Placements are made in collaboration between the student, mentor, program manager, and with input from outside sources (teachers, VR counselors, parents, etc.)

Consideration is made for work environment.

Accessibility

Receptive mentors

Slide 9: Learning as a Cohort

- * Students with disabilities participate in bi-weekly seminars on professional development, philosophy relating to disability.

Topics Include:

- * Reasonable accommodations
- * Disclosure
- * Attitudes about disability in the workplace
- * Social aspects

Upper-level students participate as mentors to younger students during activities, launches, and informal communication.

Slide 10: Follow-up and Retention

Students are connected to their NASA Space Grant consortiums, chapter affiliates, other NASA Centers within their region, and alumni email listserv.

For K-12 students, consultation with school guidance counselors and teachers to maintain an elevated level of enthusiasm for STEM subjects.

Slide 11: Collaborative Partnerships

Relationship created with personnel in human resources, office of education, equal opportunity, local contractor association, and engineering directorates to encourage continue internship and employment opportunities for students with disabilities.

HR specialist and managers are encouraged to utilize Schedule A Hiring Authorities
Helpful Resources

Slide 12: Internal Resources within NASA

Centralized Funding for Reasonable Accommodations:

- Interpreter, Reader, and Scribe Services
- Funding for Assistive Technology not funded through CAP
- Accessible Facilities Management
- Accessible Campus Shuttle

People with Disabilities Advisory Committee: Represents employees with disabilities across the center and agency from various disciplines.

Slide 12: Helpful Resources

External Resources:

- Computer Electronic Accommodations Program (CAP)
- Workforce Recruitment Program (WRP)

Community Based Organizations:

- American Association for the Advancement of Science (AAAS)
- National Federation of the Blind (NFB)
- University of Maryland Eastern Shore (UMES)
- Worcester County Economic Development
- Maryland Institute for Space Technology
- Easter Seals of Delaware
- Maryland Department of Rehabilitation Services
- Maryland HAWK Corporation